

ILLINOIS COMMERCE COMMISSION

DOCKET NO. 02-0171

DIRECT TESTIMONY

OF

DONALD L. RICHARDSON

ON BEHALF OF

UNION ELECTRIC COMPANY

d/b/a AmerenUE

St. Louis, Missouri
April , 2002

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UNION ELECTRIC COMPANY
d/b/a AmerenUE**

Q. Please state your name and business address.

A. My name is Donald L. Richardson and my business address is 1901 Chouteau Avenue, St. Louis, Missouri.

Q. By whom are you employed and in what position?

A. I am employed by Ameren Services Company as a Consulting Environmental Engineer in Property Remediation & Emergency Response Section of the Environmental Safety and Health Department.

Q. Describe your educational and work background.

A. I have a Bachelor and Master of Science in Thermal and Environmental Engineering from Southern Illinois University. I am a licensed Professional Engineer in Missouri and Illinois. For approximately 5 years, I was employed as an engineer with the Illinois Environmental Protection Agency before I accepted a job in the Environmental Department of Central Illinois Public Service Company in 1981. I have worked with former manufactured gas plant (MGP) sites since the early 1980's.

1
2 **Q. Describe your involvement and responsibilities with respect to the Alton**
3 **Manufactured Gas Plant ("MGP") site.**

4 A. I am the current project manager for the Alton MGP site. As the project manager,
5 I am responsible for the investigation and management of the remediation of the site. I am
6 also the Company's liaison with the IEPA regarding the Alton MGP site.

7
8 **Q. Did the Company incur any expenditures in relation to manufactured gas**
9 **plant ("MGP") sites formerly owned and/or operated by AmerenUE?**

10 A. Yes. The Company has one MGP site located in Alton, Illinois, and AmerenUE
11 incurred expenses in 2001 associated with that site.

12
13 **Q. Describe the expenses incurred by the Company in 2001 in connection with**
14 **the Alton MGP site.**

15 A. In 2001, the Company retained Phillips Environmental to revise documents to
16 meet the requirements of Illinois' TACO program. The majority of the \$3621.84 spent in
17 2001 was incurred as part of that effort. Under its current schedule, remediation of the
18 Alton MGP is planned for 2003.

19
20 **Q. Please describe the technology available for remediating MGP sites.**

21 A. There are numerous technologies available to remediate sites. Each technology
22 has certain requirements, which must be present at a site to make it a viable option for

1 consideration. Our consultants evaluate technologies as to the cost and chances of
2 successful meeting numerical cleanup objectives.

3 For soil to date we have used removal with conventional equipment with disposal
4 at either landfills or incinerators. To date, these have proven to be reliable for meeting
5 cleanup objectives at the least cost. For groundwater, pumping and treating through a
6 standard and very reliable carbon filter system is being used at a CIPS site in Taylorville,
7 Illinois. Natural attenuation is a method the Company is looking at currently to supplement
8 remediation. This involves removal of the heaviest contamination (source) so that naturally
9 occurring microbes at a site may flourish and destroy the remaining contamination.

10 Groundwater monitoring is necessary after completion of source removal to verify, if natal
11 attenuation is occurring at the site. In addition, the Company is a member of several trade
12 organizations The Electric Power Research Institute (EPRI) and the Gas Technologies
13 Institute (GTI). These organizations provide information and research regarding new and
14 innovative cleanup technologies. In addition, numerous vendors with various microbe
15 technologies are constantly approaching the Company and our consultants.

16
17 **Q. Has the Company considered using microbe technology at any of its sites?**

18 A. Stand alone microbe technology usually requires very specific conditions to work
19 properly. Providing these conditions in field conditions have been shown to be very costly.
20 In addition, specific numerical standards can not be met for all compounds especially the
21 large chain PNAs. Currently, microbe technologies work best in combination with other
22 technologies. For example, the Company has recently hired a consultant to review the
23 Taylorville pump and treat site for possible operating cost reductions. One area they
24 investigated was using microbe technologies to lower the lighter organic compounds in the

1 groundwater. These lighter compounds use up the carbon filter capacity quickly but are
2 easily destroyed by microbes. The carbon filters would remove the heavier large chain
3 PNAs not easily destroyed by microbes thereby, increasing the carbon filter life. The
4 combination of these two technologies may prove to be more cost-effective than each use
5 alone. Additional studies at the CIPS site in Taylorville, Illinois are planned to further
6 evaluate this technology.

7
8 **Q. With respect to the current reconciliation period, in your opinion, were all of**
9 **these remediation costs prudently incurred?**

10 A. Yes, they were.
11

12 **Q. What is the basis for your opinion?**

13 A. My opinion is based on the prudence standards referenced by the Commission in
14 its Order issued in Docket 91-0080 through 91-0095. Those standards are as follows:

- 15 (1) reasonable and appropriate business standards;
16 (2) the requirements of other relevant state or federal authorities;
17 (3) the minimization of costs to ratepayers consistent with safety, reliability
18 and quality assurance; and
19 (4) the facts and knowledge the Company knew or reasonably should have
20 known at the time the costs were incurred.
21
22

23 **Q. How do these costs satisfy the first cited prudence standard?**

24 A. All phases of the remedial activities are conducted using currently acceptable
25 professional practice.
26

1 **Q. With respect to the second cited prudence standard, has the work performed**
2 **to date been submitted to the IEPA for review?**

3 A. Yes. All work plans, health and safety plans, air monitoring plans and remedial
4 investigation reports have been submitted for agency approval and comment. The work
5 performed by the consultant to analyze the TACO cleanup standards did not result in a
6 document necessary for IEPA approval.

7
8 **Q. In connection with the work performed at the MGP sites, has the Company**
9 **sought to minimize the cost of ratepayers?**

10 A. Yes, it has. AmerenUE has managed the site investigations in the most cost-
11 efficient manner possible, consistent with its obligations under federal and state laws. The
12 Company used appropriate business standards in selecting the best qualified and least-cost
13 contractor through the competitive bid process. All invoices submitted by the contractor
14 are reviewed to ensure they reflect actual job and technical performance, as well as
15 conditions and terms of the contract.

16 In addition, the site investigation work was performed in a phased approach to
17 appropriately limit and allocate expenditures to only the degree warranted by site
18 conditions. The Company reviewed and monitored all work performed by the contractor at
19 the sites in order to ensure that the work performed was both necessary and cost-effective.

20
21 **Q. With respect to the fourth and final prudence standard, were the**
22 **expenditures based on facts and knowledge the Company had at the time of the**
23 **expenditures?**

1 A. Yes, they were. The Company has taken a phased approach to its MGP
2 investigation. Each investigation starts with a core program of site investigation and
3 evaluation. Additional steps, if necessary, are developed, implemented and based on
4 established facts. This ensures a thorough approach, while also minimizing costs.

5
6 **Q. You mentioned "TACO." Please describe that program.**

7 A. TACO (Tiered Approach to Corrective Action Objectives) is a risk-based
8 program to develop cleanup objectives for contaminated soil and groundwater in Illinois.
9 The program involves several steps and is administered by the Illinois Environmental
10 Protection Agency ("IEPA"). The primary steps of the TACO process are: 1) enroll in the
11 program with the IEPA; 2) conduct a site investigation; 3) develop cleanup levels; 4) if
12 necessary, plan the cleanup; 5) if necessary, perform and document the cleanup; 6) record
13 the "No Further Remediation" (NFR) letter; and 7) reimburse the IEPA and pay NFR
14 assessment fees.

15
16 **Q. Has or will the Company use the TACO program in connection with the**
17 **Alton site?**

18 A. Initial site investigation work at the Alton site was performed prior to the
19 development of the TACO program by the Illinois EPA. All future work, however, will be
20 conducted pursuant to the TACO program. As stated earlier, the Company hired a
21 consultant in March 1999 to evaluate the Alton site in regard to the TACO program. The
22 consultant will identify any additional data needs and reports necessary to utilize the TACO
23 program for cleanup criteria and potential remediation.

1
2 **Q. In prior testimony, the Company has described a “phased approach” with**
3 **respect to the remediation of the Alton site. Explain how this “phased approach”**
4 **relates to the TACO program.**

5 A. A phased approach is being utilized at the Alton site. The site investigation was
6 performed in three phases. Upon completion of each phase, data was evaluated and
7 additional data needs were assessed. This phased approach reduces the overall amount of
8 samples, borings and monitoring wells necessary to characterize the site. After the site has
9 been determined to be adequately characterized, the next phase will be initiated to establish
10 cleanup objectives for the Alton site. Cleanup objectives are based using either the Tier 1
11 and 2 tables within the TACO regulations or a full risk assessment may be conducted under
12 the Tier 3 provisions of the TACO regulations. Once these objectives are set, the
13 conceptual design phase can be started to develop cleanup/management options. Under
14 TACO, site contaminates may be managed instead of being removed. Detailed
15 cleanup/management plans are completed after a cleanup option has been selected. The
16 final phase is the initiation of the cleanup. The IEPA is involved with the review and
17 approval of each phase of the site investigation and development of potential remediation
18 plans.

19
20 **Q. What is the status of investigation and remediation of the Alton site?**

21 A. As mentioned earlier, the Company is in the process of revising and resubmitting
22 to IEPA a site investigation report to comply with TACO program requirements. Cleanup
23 objections under TACO are tied to a large degree on land use. The Company does not own

1 or control the site and must negotiate with the owner and its long-term tenant, the U.S.
2 Postal Service, on land restrictions. The Company plans to initiate those discussions later
3 this year.
4

5 **Q. Please provide the projected timeline for the remediation of the site.**

6 A. A definitive timeline for site remediation has not been developed. As mentioned
7 earlier, the Alton site is currently owned by a third party and occupied by the U.S. Postal
8 Service under a long-term leasehold interest. Since AmerenUE does not own the site,
9 cleanup objectives will require negotiations with the site owner and the U.S. Postal Service
10 and approval by the IEPA. The Company considers Alton to be in the upper-tier of sites to
11 be remediated and, assuming favorable negotiations, would commence site cleanup
12 beginning in 2003.
13

14 **Q. Did the Company incur any insurance-related costs in 2001?**

15 Yes. In September 2001, Ameren Corporation purchased a general liability
16 insurance policy for third party liability claims relating to or arising out of MGP sites
17 owned and/or operated by its subsidiaries including UE. The cost of this policy is allocated
18 to each MGP site.
19

20 **Q. Please describe the involvement of the Illinois Environmental Protection**
21 **Agency at the site, including the present status of their involvement.**

22 A. Based on the site investigation report submitted to the IEPA, the Company
23 believes the MGP residuals present at the Alton site, are located underneath a paved

1 parking lot and present a minimal route of exposure to the public. Accordingly, site
2 conditions do not present an imminent risk to human health or the environment. To date,
3 the IEPA has not requested the Company to conduct any further remediation activities.
4 The ultimate goal of the Company for any potential remediation of the site would be
5 obtaining a "No Further Remediation" letter from the IEPA. To achieve this goal, the
6 IEPA will need to be fully involved in the review and approval of each phase of the
7 investigation and development of potential site remediation plans.
8

9 **Q. Please provide an estimate (estimated range) of the total remediation cost.**

10 A. An estimate of cleanup cost is difficult to establish until the Company, the site
11 owner and the IEPA agree upon a specific cleanup plan. However, based upon experience
12 with other sites and available technology, the Company estimate remediation costs could
13 range between 1.9 and 7.2 million dollars. If landowner and tenant negotiations proceed
14 favorably, the Company will undertake a remediation with a cost in the lower range of this
15 estimate or less. The higher end of the cost estimate would involve soil removal with off-
16 site thermal treatment of the soil. TACO allows soils with lower contamination to be left
17 on-site provided the exposure pathway can be eliminated. Elimination of the exposure
18 pathways can be accomplished by various methods such as groundwater restrictions, deed
19 restrictions, and engineered barriers. Engineered barriers can be existing buildings, asphalt
20 or concrete pavement or a cap made with clay. Pathway elimination in the majority of
21 situations is significantly lower in cost than soil removal with treatment.

22 **Q. Does this conclude your testimony?**

23 A. Yes it does.
24

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

ILLINOIS COMMERCE COMMISSION, on)	
its own Motion,)	
)	
vs.)	Docket No. 02-0171
)	
UNION ELECTRIC COMPANY)	
d/b/a AmerenUE)	
)	
Reconciliation of revenues collected under)	
Coal Tar Riders with prudent costs associated)	
with coal tar clean up expenditures)	

AFFIDAVIT OF DONALD L. RICHARDSON


STATE OF MISSOURI)	
)	SS
CITY OF ST. LOUIS)	

Donald L. Richardson, being first duly sworn on his oath, states:

1. My name is Donald L. Richardson. I work in St. Louis, Missouri and I am a Consulting Environmental Engineer in the Waste Management Division of the Environmental, Safety and Health Department.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony consisting of 8 pages, prepared in written form for introduction into evidence in Illinois Commerce Commission Case No. 02-0171 on behalf of Union Electric Company d/b/a AmerenUE.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.


Donald L. Richardson

Subscribed and sworn to before me this 29th day of April, 2002.


Notary Public

My Commission expires:

DEBBY ANZALONE
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: April 18, 2006